

AMENDMENTS TO THE DRAWINGS

The attached replacement sheet of drawings includes changes to FIG. 2 and replaces the original sheet including FIG. 2. In FIG. 2, the terms “code_file” have been replaced with the terms “model_file” in box 101, the terms “model_file” have been replace with the terms “code_file” in box 103, and the term “VOB” has been replaced by the term “database” in box 112.

REMARKS

In response to the above-identified Final Office Action, Applicants amend the Application and seek re-consideration in view of the following remarks. In this Response, Applicants amend claims 1-18 and 21-22. Applicants do not cancel or add any claims. Accordingly, claims 1-18 and 21-22 remain pending in the Application.

I. Drawing Objections

The Patent Office objects to FIG. 2 because there is a “mismatch between the numerals of the drawings and their counterparts described in paragraph [0027] of the Specification.” Applicant has amended FIG. 2 so that the reference numerals are consistent with the Specification. Specifically, the terms “code_file” have been replaced with the terms “model_file” in box 101, the terms “model_file” have been replaced with the terms “code_file” in box 103, and the term “VOB” has been replaced by the term “database” in box 112. Applicants submit that no new matter is added by the amendments to FIG. 2. Accordingly, Applicants respectfully request withdrawal of the objection to FIG. 2.

II. Claim Objections

Claims 1, 7, and 12 stand objected to for reciting the terms “expected” computer code. Specifically, the Patent Office suggests that claims 1, 7, and 12 should “be amended to include further teachings that otherwise convey how ‘expected’ code is more compliant to the first ‘generated’ code.” Applicants have amended claims 1, 7, and 12 to recite that the “expected” code is based on values, inputs, outputs, function type, and syntax in the model code from which the generated computer code is based. Therefore, Applicants believe that claims 1, 7, and 12, as amended, convey the use of the “expected” code with respect to the “generated” code. Accordingly, Applicants respectfully request withdrawal of the objection to claims 1, 7, and 12.

III. Claims Rejected Under 35 U.S.C. § 112

A. First Paragraph Rejection

Claims 1-18 and 21-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse the rejection, at least in view of the amendments to claims 1-18 and 21-22.

Applicants have amended claims 1-18 and 21-22 to remove the elements of generating first and second plurality of lines of computer code, and comparing the two lines of computer code after generation. As amended, claims 1-18 and 21-22 recite that the lines of generated computer code are compared to “expected” computer code, wherein the expected computer code is based on determined function values, inputs, outputs, function type, and syntax in the model code from which the generated computer code is based. Therefore, Applicants submit that amended claims 1-18 and 21-22 comply with the written description requirement. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-18 and 21-22.

B. Second Paragraph Rejection

Claims 1-18 and 21-22 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants respectfully traverse the rejection, at least in view of the amendments to claims 1-18 and 21-22.

In rejecting claim 1-18 and 21-22, the Patent Office alleges that claims 1-18 and 21-22 are incomplete because they omit essential elements that create a “gap” between the recited elements. In response thereto, Applicants have amended independent claims 1, 7, and 12 (and dependent claims 2-6, 8-11, 13-18, and 21-22) to recite that the “expected” code is based on values, inputs, outputs, function type, and syntax in the model code from which the generated computer code is based. Therefore, Applicants believe that claims 1, 7, and 12, as amended, are definite because there is no “gap” between recited elements. Accordingly, Applicants respectfully request withdrawal of the rejection to claims 1-18 and 21-22.

IV. Claims Rejected Under 35 U.S.C. §103

Claims 1-18 and 21-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,983,446 issued to Charisius et al. (“*Charisius*”) in view of the ordinary skill in the art (“*OSA*”). Applicants respectfully traverse the rejection, at least in view of the amendments to independent claims 1, 7, and 12.

To render a claim obvious, the cited reference must teach or suggest each and every element of the rejected claim (*see* MPEP § 2143). Among other elements, claim 1 defines:

A method for verifying computer code having a plurality of lines generated by a code generating module from a model file of a system including a plurality of functions generated by a model module, the method comprising:

determining expected code for the generated computer code based on the determined values, inputs, outputs, function type, and syntax for the generated computer code; [and]

comparing each line of the generated computer code and the expected code to determine if the generated computer code includes correct values, correct inputs, correct outputs, correct functions, and correct syntax.

Applicants submit that the combination of *Charisius* and the *OSA* fails to teach or suggest at least these elements of claim 1.

Charisius discloses a software development tool that provides:

simultaneous round-trip engineering, i.e., the graphical representation 204 is synchronized with the textual representation 206. Thus, if a change is made to the source code 202 via the graphical representation 204, the textual representation 206 is updated automatically. Similarly, if a change is made to the source code 202 via the textual representation 206, the graphical representation 204 is updated to remain synchronized. There is no repository, no batch code generation, and no risk of losing code. (Col. 5, lines 50-60).

Therefore, Applicants submit that *Charisius* discloses a system and method for automatically updating a graphical representation of source code when changes are being made to the source code itself and updating the source code when changes are being made to the graphical representation of the source code. In other words, *Charisius* discloses a system where the source code is automatically updated as the model is changed and the model is updated as the source code is changed. Thus, Applicants submit that a second computer code is not being generated in *Charisius*' system and method. Specifically, *Charisius* does not disclose two codes being generated from the same model file, and certainly does not disclose a second computer code being generated and used to verify the correctness (e.g., values, inputs, outputs, function type, and syntax) of the first computer code because *Charisius* is concerned with modifying the model file and the source code simultaneously so that they are consistent with one another. That is, the source code is not used to check the correctness of the model file and vice versa in *Charisius*' system and method. The Patent Office relies on the *OSA* to cure the defects of *Charisius*; however, Applicants submit that the *OSA* fails to cure such defects.

In making the rejection, the Patent Office does not rely on the *OSA* as teaching or suggesting the elements of “determining expected code for the generated computer code based on the determined values, inputs, outputs, function type, and syntax for the generated computer code” and “comparing each line of the generated computer code and the expected code to determine if the generated computer code includes correct values, correct inputs, correct outputs, correct functions, and correct syntax,” as recited in claim 1. Furthermore, Applicants submit that it is not within the skill set of the skilled artisan in this art to know such elements. Therefore, the *OSA* fails to cure the defects of *Charisius*.

The failure of the combination of *Charisius* and the *OSA* to teach or suggest each and every element of claim 1 is fatal to the obviousness rejection. Therefore, claim 1 is not obvious over *Charisius* in view of the *OSA*. Accordingly, Applicants respectfully request withdrawal of the rejection of independent claim 1.

Claims 2-6 and 21 depend from claim 1 and include all of the elements thereof. Therefore, Applicants submit that claims 2-6 and 21 are not obvious over *Charisius* in view of the *OSA* at least

for the same reasons as claim 1, in addition to their own respective features. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 2-6 and 21.

Regarding the rejection of claims 7-11 and 22, claims 7-11 and 22 each recite the elements of “code that generates an expected computer code based on the determined values, inputs, outputs, function type, and syntax” and “code that compares each line in the generated computer code and the expected code to determine if the generated computer code includes the determined values, inputs, outputs, function type, and syntax in the expected computer code” similar to the elements of “determining expected code for the generated computer code based on the determined values, inputs, outputs, function type, and syntax for the generated computer code” and “comparing each line of the generated computer code and the expected code to determine if the generated computer code includes correct values, correct inputs, correct outputs, correct functions, and correct syntax,” as recited in claim 1. As such, Applicants submit that the discussion above regarding the combination of *Charisius* and the *OSA* failing to teach or suggest each and every element of claim 1 is equally applicable to similar elements recited in claims 7-11. Therefore, Applicants submit that claims 7-11 and 22 are not obvious over *Charisius* in view of the *OSA* at least for the same reasons as claim 1, in addition to their own respective features. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 7-11 and 22.

Regarding the rejection of claims 12-18, claims 12-18 each recite the elements of “determine expected computer code for the generated computer code based on the determined values, inputs, outputs, functions type, and syntax for the generated computer code” and “compare each line in the generated computer code with the expected computer code to determine if the generated computer code includes correct values, correct inputs, correct outputs, correct functions, and correct syntax” similar to the elements of “determining expected code for the generated computer code based on the determined values, inputs, outputs, function type, and syntax for the generated computer code” and “comparing each line of the generated computer code and the expected code to determine if the generated computer code includes correct values, correct inputs, correct outputs, correct functions, and correct syntax,” as recited in claim 1. As such, Applicants submit that the discussion above regarding the combination of *Charisius* and the *OSA* failing to teach or suggest each and every

element of claim 1 is equally applicable to similar elements recited in claims 12-18. Therefore, Applicants submit that claims 12-18 are not obvious over *Charisius* in view of the *OSA* at least for the same reasons as claim 1, in addition to their own respective features. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 12-18.

V. Amendments to the Specification

Applicants have amended paragraphs [0027] and [0034] so that various reference numerals recited therein are consistent with FIG. 2. Specifically, the reference numeral for the verification database has been changed from “212” to “112” and the reference numeral for the display has been changed from “202” to “204.” Therefore, Applicants submit that the Specification and FIG. 2 are consistent with one another. Furthermore, Applicants submit that no new matter is added by the amendments to paragraphs [0027] and [0034].

CONCLUSION

In view of the foregoing, it is believed that all claims now pending are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (480) 385-5060 or jgraff@ifllaw.com.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-2091 for any fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

Date September 17, 2008

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Attachment: Replacement Sheet